

WTC

RECEIVED

WIRELESS TRANSACTIONS CORPORATION
1183 Bordeaux Drive, Suite 22
Sunnyvale, California 94089
Telephone: (408) 747-7300 Fax: (408) 747-7311
APR 25 9 48 AM '95

April 21, 1995

FCC
FEES SECTION

RECEIVED

Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, DC 20554

DOCKET FILE COPY ORIGINAL

APR 26 1995

FCC MAIL ROOM

Attention: Mr. William S. Caton, Acting Secretary

Reference: Amendment of Part 90 of the Commission's Rules to Adopt Regulations for
Automatic Vehicle Monitoring Systems --- PR Docket No. 93-61

Dear Mr. Caton:

Wireless Transactions Corporation wishes to submit the enclosed petition for
reconsideration of the Report and Order in the referenced proceeding.

If you need more information, you can contact me by telephone at (408) 747-7300 or by
FAX at (408) 747-7311.

Sincerely,



Hugh M. Pearce
President

enclosure

No. of Copies rec'd _____
List A B C D E

0

APR 26 1995

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

FOC MAIL ROOM

In the Matter of

Amendment of Part 90 of the
Commission's Rules to Adopt
Regulations for Automatic
Vehicle Monitoring Systems

PR Docket No. 93-61

To: The Commission

PETITION FOR RECONSIDERATION

In accordance with Section 1.429 of the Commission's rules, Wireless Transactions Corporation (WTC) submits this petition for reconsideration of the Report and Order in the above-referenced proceeding. WTC is a California corporation that manufactures Part 15 communications products operating in the 902-928 Mhz band for point-of-sale applications. These products enable on-line credit/debit card transactions in locations where a telephone connection is unavailable or prohibitively expensive. WTC expects to sell over 350,000 of these devices over the next five years.

In the Report and Order, the Commission allocated the entire 902-928 Mhz band for Location and Monitoring Service (LMS) (formerly Automatic Vehicle Monitoring) and established spectrum sharing rules to facilitate combined use of the band by LMS, Part 15 users, and others. Although the Commission's goal was to accommodate the various users of the 902-928 Mhz band, the rules adopted in the Report and Order fall short of that goal and, instead, weight the priorities for utilization of the band heavily in favor of LMS. Therefore, WTC respectfully requests that the Commission reconsider its decision in accordance with the comments set out below.

DISCUSSION

In structuring its spectrum sharing plan the Commission violated the original premise under which LMS and Part 15 users could co-exist in the 902-928 Mhz band, that is, that no single user is occupying a large fraction of the band at high power on a continuing basis. Part 15 spread spectrum users can operate in the presence of high power, narrowband

signals and in the presence of other spread spectrum signals. Likewise, high power, narrowband users can operate in the presence of spread spectrum signals because of their low power. However, the new rules allow LMS to use high power, wideband signals which force Part 15 users to operate only in the remaining part of the band. If the Part 15 users attempt to operate in the part of the band utilized by the high power, wideband LMS, they will be unable to communicate. Moreover, some of these high power LMS transmitters are mobile, forcing the Part 15 users to accommodate a changing high power signal environment. As a result, a Part 15 user might deploy a communications solution for a customer based on the signal environment measured at one point in time, only to have the environment change substantially rendering the customer's solution unacceptable.

While granting LMS greater flexibility in its use of the 902-928 Mhz band, the rules adopted in the Report and Order impose additional constraints on Part 15 users. Specifically, antenna height restrictions are imposed on outdoor installations that exceed five meters. These restrictions severely curtail Part 15 user deployments while providing very little reduction in interference to LMS.

The cumulative effect of exposing Part 15 users to these additional (1) limitations due to increased interference from LMS and (2) restrictions on deployment is to "cut off at the knees" all of the companies whom the Commission has been encouraging to develop and commercialize spread spectrum communications products under the Part 15 rules. For those of us who have invested heavily in the development of Part 15 products, it is extremely discouraging!

RECOMMENDATIONS

1. Multilateration LMS wideband forward links should be prohibited since they represent a new and devastating interference source for Part 15 users. Signals of 30 watts effective radiated power and 8 Mhz bandwidth that can be transmitted from any elevation cannot reasonably share a band that is only 26 Mhz wide with many other users, most of which are constrained to 1 watt of effective radiated power. LMS implementers have several alternatives to these wideband, high power signals for accomplishing their mission.
2. The antenna height and power restrictions imposed upon Part 15 users as contained in Section 90.361 should be eliminated. The propagation range of Part 15 device signals and the interference level caused by these signals to other users of the 902-928 Mhz band are already limited by the 1 watt limit on ERP. Additional limitations on antenna height and

transmitted power only serve to limit the valuable applications of Part 15 devices, and drive additional Part 15 product companies out of business. The reductions in interference levels for LMS that would result from these limitations are minimal.

CONCLUSION

For the reasons set forth herein, Wireless Transactions Corporation urges the Commission to reconsider its Report and Order in this proceeding, and to modify its spectrum sharing plan for the 902-928 Mhz band in accordance with the suggestions outlined above.

Respectfully submitted,



Hugh M. Pearce
President and CEO
Wireless Transactions Corporation